XPar 348

PR-8200

This product manual contains important information about the safe installation and use of this projector. Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

PR LIGHTING LTD.
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Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of this manual we reserve the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.

Every unit is tested completely and packed properly by the manufacturer. Please make sure the packing and / or the unit are in good condition before installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the unit. Any damage caused by improper use will not be assumed by the manufacturer and / or dealer.

ACCESSORIES

These items are packed together with the projector:

Name	Quantity	Unit	Remark
Shading device	1	Pc	
Shading barrel	1	Pc	Optional
Safety cord	1	Pc	
This manual	1	Pc	

SAFE USAGE OF THE PROJECTOR

When unpacking and before disposing of the carton, check there is no transportation damage before using the projector. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.

The projector can be used indoors and outdoors, IP67.

The projector is not designed or intended to be mounted directly on to inflammable surfaces.

The projector is only intended for installation, operation and maintenance by qualified personnel.

Do not project the beam onto inflammable surfaces, minimum distance is 5m. ◁ 5m ∈

Avoid direct exposure to the light from the lamp. The light is harmful to eyes.

Do not attempt to dismantle and/or modify the projector in any way.

Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of power supply match the power requirements of the projector.

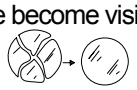
It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.

Do not connect this device to any other types of dimmer apparatus.

Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

Keep the optical system clean. Do not touch the LED lens with bare hands.

When the projector is hanged to a high place, please use a safety cord provided to pass through the projector handles as a secondary safety fixing for safety seasons. For details, refer to “INSTALL THE PROJECTOR “section.

LED lens shall be changed if they have become visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches. 

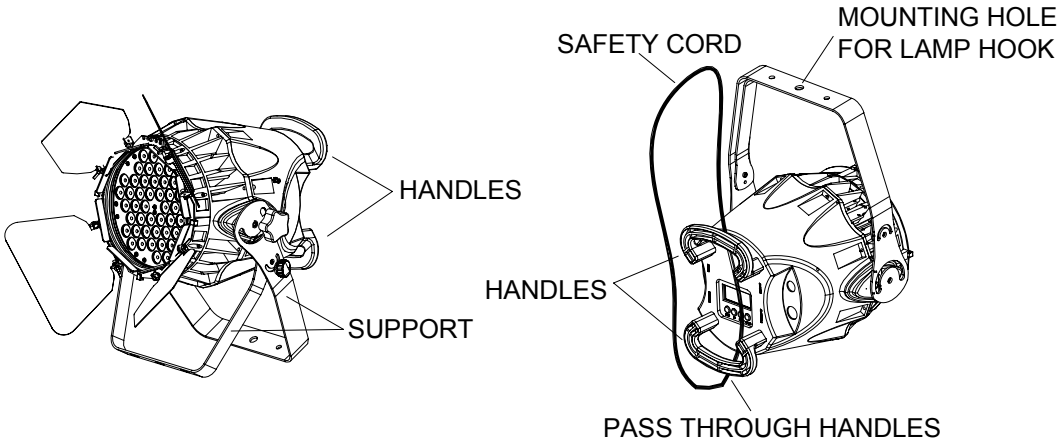
Exterior surface temperatures of the projector after 5 minutes’ operation is 55℃, when achieving steady state it is 60℃.

There is no user serviceable parts inside the projector, do not open the housing and never operate the projector with the covers removed.

Always disconnect from the mains, when the device is not in use or before cleaning it or before attempting any maintenance work !

If you have any questions, don’t hesitate to consult your dealer or manufacturer.

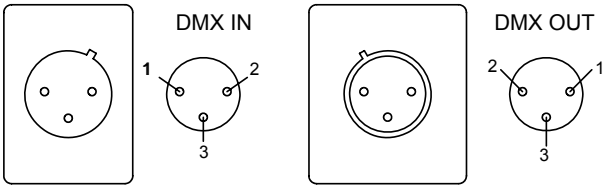
INSTALL THE PROJECTOR



When the projector is used, as the left figure above, unfold the support to certain angle and put the projector onto a flat surface. Make sure it is steady.

When the projector is used at a high place, as the right figure above, fold the support, turn it round to the top of the projector, connect a lamp hook to the mounting hole reserved in the support by screws, and then hang the hook to a high place. Eventually, use the safety cord provided to pass through the handles and hang it as a second safety fixing.

CONTROL SYSTEM AND POWER CONNECTION



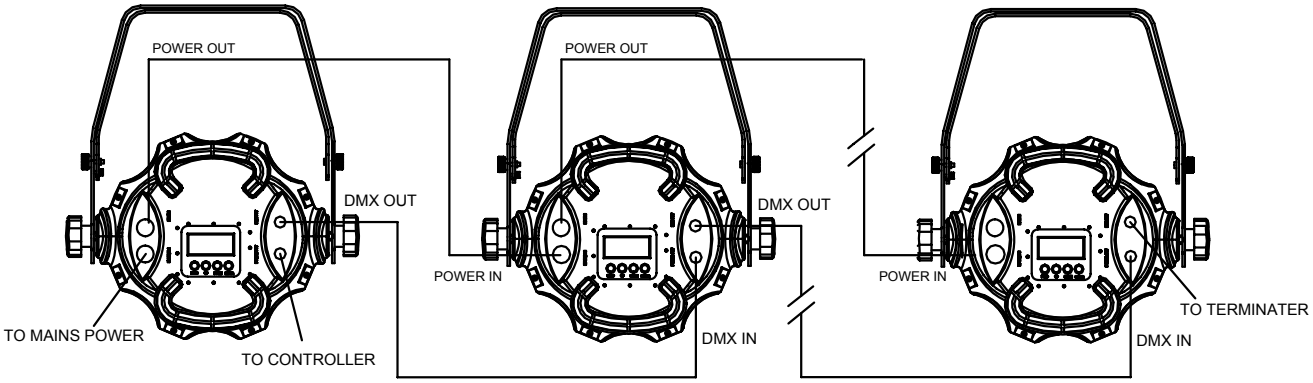
DMX512	
PIN	FUNCTION
1	GND
2	DATA -
3	DATA +

Connection between the controller and a projector and between one projector and another must be made with a 2 core-screened cable, with each core having at least a 0.5mm diameter. Please use the projector's cannon 3- pin signal input and output cables as connection. The 3-pin signal connections are connected as shown in the figure above.
Note: Care should be taken to ensure that none of the pins touch the metallic body of the plug or each other. The body of the plug is not connected in any way. The XPar 348 accepts digital control signals in protocol DMX512 (1990).

The amount of projectors connected in parallel is not more than 32. Connect the controller's output to the first fixture's input cable with a 3-pin signal cable, connect the first fixture's output cable to the second fixture's input cable and connect the rest fixtures in the same way. Eventually, connect the last fixture's output cable to a DMX terminator. Note: Only when all the start addresses of fixtures are set the same, synchronous control could be achieved.
When the first fixture is not connected to the controller, and all the other connections are the same as above, it is master / slave mode connection. To achieve master / slave mode, set the first fixture master , the others salve(slave is default).

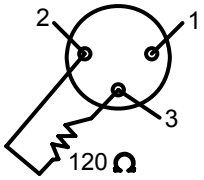
As for power connections, each projector has to be supplied separately by external power. Use the power cord of each projector to connect the mains power directly, paying attention to the voltage and frequency marked on the panel of the projector.
Use the power cord of the first projector's power in cable connect to the mains power directly, then connect the first fixture's power out cable to the second fixture's power in cable and connect the rest fixtures in the same way. Eventually, all fixture connect finished. When using voltage is 200V, 220V, 230V, 240V, the amount of projectors connected is not more than 15. When using voltage is 100V, 120V, the amount of projectors connected is not more than 8. Paying attention to the voltage and frequency marked on the panel of the projector.

All of the connections are as the figure below.

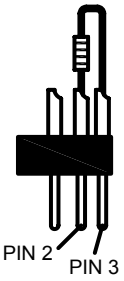


DMX TERMINATOR

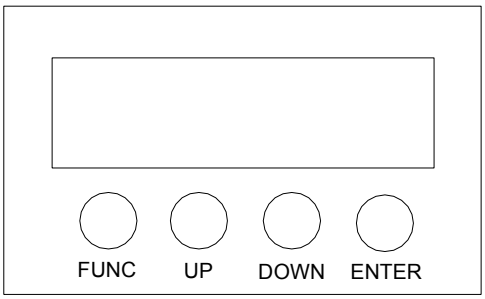
In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.
The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.



DMX TERMINATOR
CONNECTION
Connect a 120Ω(OHM) resistor across pins 2 and 3 in an XLR plug and insert into the DMX out socket on the last unit in the chain.



SETUP OPTIONS-PROJECTOR CONFIGURATION



Projector configuration can be set conveniently via push-button switch and LED display.
Launch the projector and press button ENTER for more than 5 seconds to unlock the panel, the LCD will show the function menu of the projector, each main menu has its submenus and each submenu has a specific function. For details, please see the “OPERATION MENU” section.
Press button UP or DOWN if you want to browse through the various Setup Options. Press button ENTER to save your settings or enter the next menu. Press button UP or DOWN to shift.
Press button FUNC, it will return to the upper menu one by one or browse through the main menu.

TO SET THE DMX START ADDRESS

Each Xpar348 must be given a DMX start address so that the correct projector responds to the correct control signals. This DMX start address is the channel number from which the projector starts to “listen” to the digital control information being sent out from the controller. The Xpar348 has 3 DMX modes, which are standard mode, extended mode and short mode. For example, the standard mode has 11 channels, so set the No. 1 projector’s address 001, No. 2 projector’s address 012, No. 3 projector’s address 023, No. 4 projector’s address 034, and so on.

Launch the projector. Press button ENTER for more than 5 seconds to unlock the panel.

Press button FUNC, UP or DOWN to find “AddR” menu.

Then press ENTER to show DMX address and press UP or DOWN to set DMX address.

At this time, the address will flash continuously. Press button ENTER to confirm and it means the setting has been enabled.

Press button FUNC, it will return to the upper menu one by one.

OPERATION MENU

1st LEVEL	2nd LEVEL	3rd LEVEL	4th LEVEL
AddR (DMX address)	XXX （XXX:1~512）		
CNFG (Config settings)	dmX (DMX mode)	STd (Standard mode)	
		EXT (Extended mode)	
		SHRT (Short mode)	
	dISP (Display settings)	ON	
		OFF (Shut off digital CRT without pressing buttons in 5 minutes)	
	mORS (Master /Slave Settings)	SLAV (Slave)	
		mAST (Master)	
	FACT (Reset factory setup)	yES	
	TRmd (Transmit parameters)	yES	
INFO (Information)	TImE (Power on hours)	XXXX	
	TEmP (LED board temperature)	XX	
	VER (Version)	X.X.X	
TEST (Test mode)	R (red)		
	G (green)		
	B (blue)		
	W (white)		
	RGb (Red/green/blue)		
	Rwb (Red/white/blue)		
	RGbw (Red/green/blue/white)		
mENU (Operation mode)	dmx (DMX mode)		
	PR XX (Preset memory, PR01~PR16）		
	ET XX (User memory,ET01~ET16）	COL1 (Colour 1)	XX (Number: 0~14)
		COL2 (Colour 2)	XX (Number: 0~14)
		COL3 (Colour 3)	XX (Number: 0~14)
		COL4 (Colour 4)	XX (Number: 0~14)

Note:

1. When multiple projectors' work together in synchronous control state, Parameters can be transmitted from the master projector to the slave projectors in the following conditions, such as DMX channel mode, Display setting status and operation mode (User memory data is included).
2. Projectors which receive Parameters transmitted shall be set slave automatically.
3. What "Number" in "ET XX" submenu represents refer to the following blank.

Number	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Colour	R	G	B	W	RG	RB	RW	GB	GW	BW	RGB	RGW	RBW	GBW	RGBW

,
Only when setting of “Number” submenu has been done and return to “ET XX” menu, corresponding colour effect comes out. You can choose numbers from Group COL1 to COL4 separately to form a user memory.

DMX PROTOCOL

Short mode	Standard mode	Extended mode	FUNCTION	DMX	DESCRIPTION
1	1	1	Dimmer	000-255	Dimming from dark to light
		2	Dimmer 16 Bit	000-255	Dimmer in 16 Bit precision
2	2	3	Colour Temperature	000	Invalid
				001-255	Colour temperature adjustment from 3200K to 10000K
				000	Invalid
				001-015	Colour Temperature 3200K
				016-031	Colour Temperature 5600K
				032-047	Colour Temperature 7200K
				048-063	Colour Temperature 10000K
				064-079	Red
				080-095	Green
				096-111	Blue
	3	4	Macro Channel	112-127	Purple
				128-143	Blue and White
				144-159	Red and White
				160-175	Green and White
				176-191	White
				192-207	Yellow and White
				208-223	Purple and White
				224-239	Effect 1
				240-255	Effect 2
3	4	5	Red	000-255	Dimming from dark to light
4	5	6	Green	000-255	Dimming from dark to light
5	6	7	Blue	000-255	Dimming from dark to light
6	7	8	White	000-255	Dimming from dark to light
		9	Hue	000-255	Hue selection
		10	Saturation	000-255	Saturation from shallow to deep
		11	Value	000-255	From dark to light
7	8	12	Strobe	000-009	Invalid
				010-255	Strobe speed from slow to fast
				000	Invalid
				001-015	Preset memory 1
				016-031	Preset memory 2
	9	13	Preset memory	032-047	Preset memory 3
				048-063	Preset memory 4
				064-079	Preset memory 5
				080-095	Preset memory 6

				096-111	Preset memory 7
				112-127	Preset memory 8
				128-143	Preset memory 9
				144-159	Preset memory 10
				160-175	Preset memory 11
				176-191	Preset memory 12
				192-207	Preset memory 13
				208-223	Preset memory 14
				224-239	Preset memory 15
				240-255	Preset memory 16
	10	14	User Memory	000	Invalid
				001-015	User memory 1
				016-031	User memory 2
				032-047	User memory 3
				048-063	User memory 4
				064-079	User memory 5
				080-095	User memory 6
				096-111	User memory 7
				112-127	User memory 8
				128-143	User memory 9
				144-159	User memory 10
				160-175	User memory 11
				176-191	User memory 12
				192-207	User memory 13
				208-223	User memory 14
				224-239	User memory 15
				240-255	User memory 16
	11	15	Memory Speed	000	Invalid
				001-015	Speed 1,the fastest
				016-031	Speed 2
				032-047	Speed 3
				048-063	Speed 4
				064-079	Speed 5
				080-095	Speed 6
				096-111	Speed 7
				112-127	Speed 8
				128-143	Speed 9
				144-159	Speed 10
				160-175	Speed 11
				176-191	Speed 12
				192-207	Speed 13
				208-223	Speed14
				224-239	Speed 15

				240-255	Speed 16, the slowest

Note:

**** Channel priority from high to low is as the following: preset memory, user memory, RGBW dimming, HSV dimming, macro channel;

****When high priority channel is used, low priority channel is invalid.

INDICATION OF LED DIGITAL TUBE

Decimal point of the first digital tube	On	DMX signal OK
	Off	No DMX signal
Decimal point of the third digital tube	On	Master / slave signal is OK
	Off	No master / slave signal
Decimal point of the fourth digital tube	On	When setting master mode
	Off	When setting slave mode
Parameters that LED digital tubes display	Flash	Parameters not saved, press “ENTER” to save them

MAINTENANCE

To prolong the life of the projector, it is very important to do the maintenance work. The environment is hash outdoors, or if the projector is idle for a long time, damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on its cover and housing. So it should be cleaned to maintain an optimum light output and at the same time to prevent it from corrupted by acid gas.

Cleaning frequency depends on the environment in which the fixture operates. Soft cloth and typical glass cleaning products should be used for cleaning. It is recommended to clean projector at least once every 20 days.

Do not use any organic solvent, e.g. alcohol, to clean housing of the apparatus.

TROUBLESHOOTING

PROBLEM	ACTION
The projector doesn’t switch on	➢ Power connection is not correct. ➢ Power supply is damaged or abnormal. Call a qualified personnel to fix it. ➢ Connection of control board is not correct. Call a qualified personnel to fix it.
The projector can be turned on, but LEDs do not emit light and are out of control.	➢ Connection of LED board is not correct. Call a qualified personnel to fix it.
The lamp comes on but the projector doesn’t respond to the controller	➢ Make sure that the projector is correctly configurated. ➢ Replace or repair the DMX cable.
The beam appears dim	➢ The projector is too hot. Take ventilation measures to make it cool.

TECHNICAL DATA

VOLTAGES:

100V/120V/200V/220V /230V/240V　AC, 50/60Hz

POWER CONSUMPTION:

210W@220V

LED:

Power consumption	3W
Amount	48（12R＋12G＋12B+12W）
Manufacturers Rated LED Life	50000 Hours

COLOURS:

RGBW colours mixing

Linearly colour temperature correction

DIMMER:

0-100% linearly adjustable

STROBE:

0~20F.P.S

BEAM ANGLE:

Beam angle	28°
Lens angle	14°

CONTROL:

DMX512, 3 pin interfaces

7 channels in short mode, 11 channels in standard mode, and 15 channels in extended mode

Master /Slave mode

16 preset memories

16 user memories

preset memories and user memories can be called by control channels,16 degree speeds adjustable

Self-test mode

OTHER FUNCTIONS:

LED board temperature display

fixture usage time display

DMX mode, setting status, operation mode and user memory data can be transmitted by synchronous control.

HOUSING:

High-intensity die-casting aluminum, IP67

WORK ENVIRONMENT TEMPERATURE:

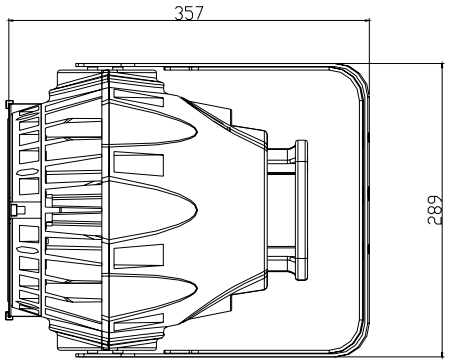
-20°C~40°C

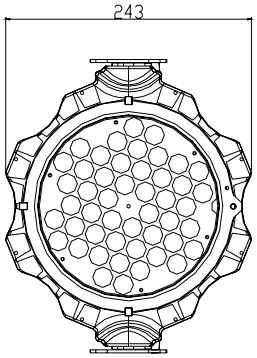
WEIGHT:

9kg

SIZES:

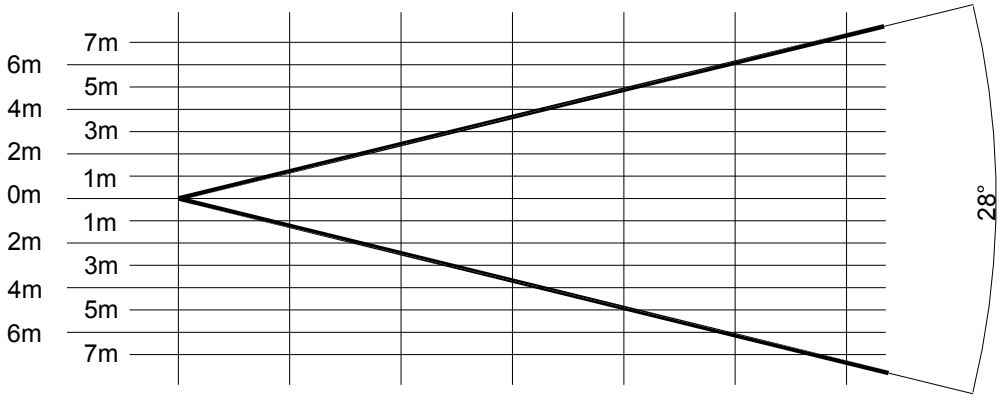
See it below



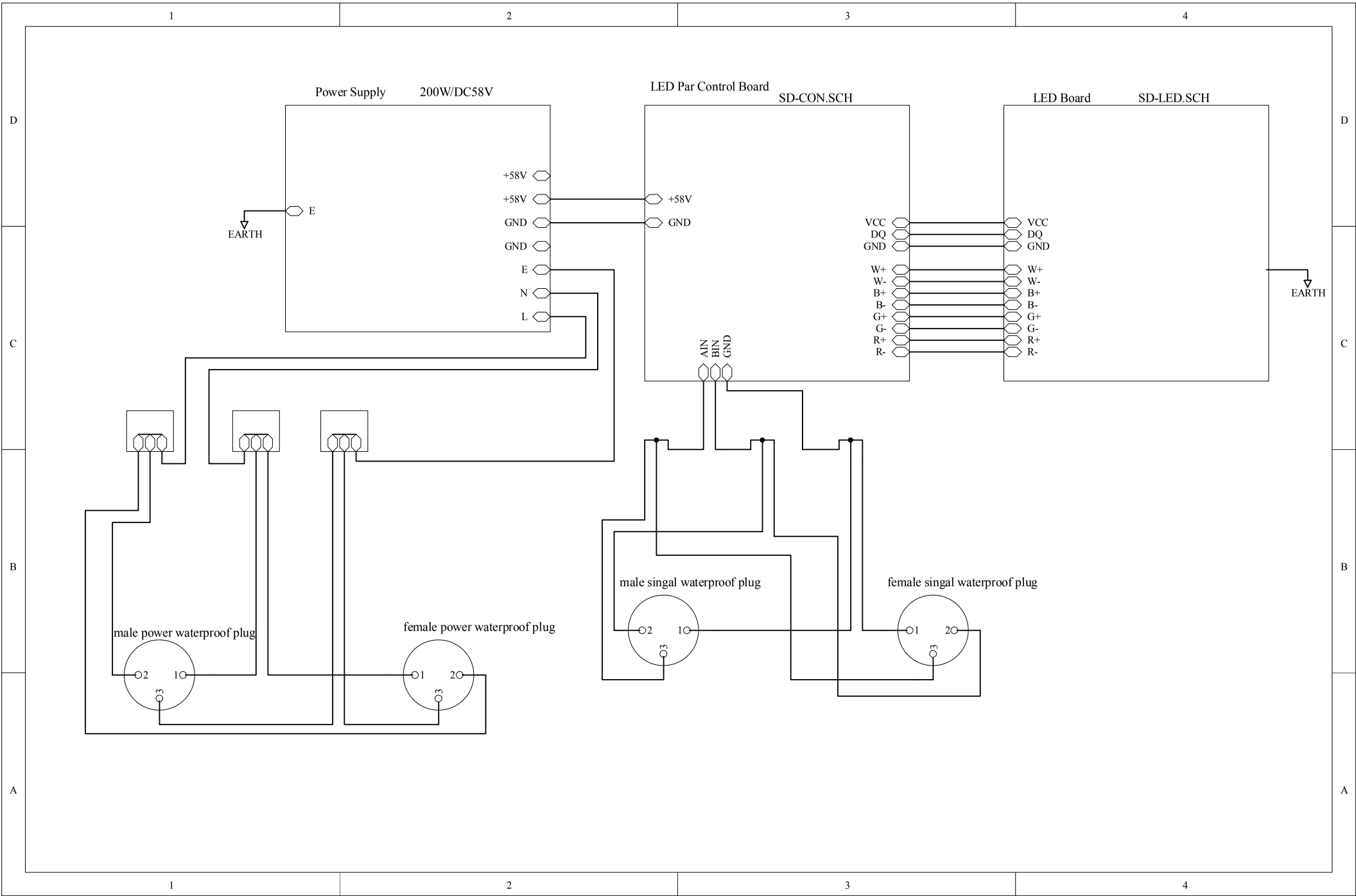


LIGHT OUTPUT:

28° lux (RGBW)	2066	516	230	129	83	57
28° lux (R)	131	33	15	8	5	4
28° lux (G)	722	180	80	45	29	20
28° lux (B)	666	166	74	42	27	18
28° lux (W)	536	134	60	34	21	15



DISTANCE(m)	0m	5m	10m	15m	20m	25m	30m
28° DIAMETER(m)	ϕ0	ϕ2.48	ϕ4.96	ϕ7.44	ϕ9.92	ϕ12.40	ϕ14.88


Power Supply 200W/DC58V
LED Par Control Board SD-CON.SCH
LED Board SD-LED.SCH
+58V
+58V
GND
GND
E
N
L
E
EARTH
+58V
GND
VCC
DQ
GND
W+
W-
B+
B-
G+
G-
R+
R-
AIN
BIN
GND
EARTH
male power waterproof plug
female power waterproof plug
male singal waterproof plug
female singal waterproof plug
1
2
3

COMPONENT ORDER CODES

NAME	PART NO.	QUANTITY	REMARK
LED LENS	070070040	48	14°
SIGNAL CABLE	120080030B	1	1.7m,male
SIGNAL CABLE	120080031B	1	1.7m,female
SIGNAL CABLE	120080032	1	0.3,male
SIGNAL CABLE	120080033	1	0.3,fmale
POWER CORD	120080034B	1	1.7m,male
POWER CORD	120080035A	1	1.7m,female
POWER CORD	120080040A	1	1.7m,female
POWER SUPPLY	192010135	1	
LED CONTROL BOARD	230060081	1	
LED BOARD	230060082	1	
LENS' TOP COVER	290080017	1	

PR LIGHTING LTD.

PR New Hi-tech Science Park, 1582 Xingye Avenue
Nancun Panyu, Guangzhou, 511442 China
TEL: +86-20-3995 2888
FAX: +86-20-3995 2330

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